

SPECIAL PAPERS ON GENERAL METEOROLOGY.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Junior Professor in Charge of Library.

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies. Anonymous publications are indicated by a —.

Australia. Commonwealth bureau of meteorology.

Report upon observations made during an official visit to Europe, Asia, and America, with recommendations referring to the meteorological service of Australia, by H. A. Hunt. [Melbourne.] 1911. 61 p. f°.

Bavaria. Königliche bayerische meteorologische Central-Station.
Deutsches meteorologisches Jahrbuch für 1911, Bayern. Jahrg. 33. München. 1912. var. pag. f°.**owman, Isaiah.**

Forest physiography. New York. 1911. xxii, 759 p. 8°.
[Treats of the climate of the United States under each of its geographic provinces.]

Bremen. [Meteorologisches Observatorium.]

Deutsches meteorologisches Jahrbuch für 1911, Freie Hansestadt Bremen. Jahrg. 22. Bremen. 1912. 84 p. f°.

British rainfall organization.

British rainfall, 1911, by H. R. Mill. London. 1912. 108, [388] p. 8°.

Chree, C[harles].

Studies in terrestrial magnetism. London. 1912. xii, 206 p. 8°. (Macmillan's science monographs.)

Cottrell, Frederick Gardner.

The electrical precipitation of suspended particles. n. p. [1911.] 21 p. 8°. (Reprint: Jour. of indust. & engin. chem., August, 1911, v. 3, no. 8.)

Curityba (Brazil). Observatorio meteorologico.

Resumo geral des observações, 1911. Curityba. [1912.] 2 folded sheets. 8°.

Delteil, A.

Note sur le climat de la Réunion. Paris. [n. d.] 39 p. 8°.

Deuxième expédition antarctique française, "Pourquoi-pas" (1908-1910).

Observations météorologiques, par J. Rouch. Paris. [1912.] 260 p. 16 pl. 4°.

Donnersberg (Bohemia). Meteorologisches Observatorium.

Das meteorologische Observatorium auf dem Donnersberge, und die ersten Beobachtungsergebnisse im Lustrum 1905-1909, von Rudolf Spitaler. Prag. 1912. 39 p. f°. (Veröffentl. No. 1.)

Egypt. Survey department.

The rains of the Nile basin, 1910. Cairo. 1912. [6], 110 p. 4°.
(Survey dept. paper no. 6.)

Ellis, Don Carlos.

A working erosion model for schools. Washington. 1912. 11 p. 4 fig. 8°. (U. S. Off. exper. sta. Circ. 117.)

Fowler, John S. & Marriott, William.

Our weather. London. 1912. xi, 131 p. 16°. (The Temple primers.)

[Great Britain. Meteorological office.]

[Meteorological observations in Crown colonies, 1910.] n. t. p. [282] p. f°.

Great Britain. Royal observatory, Greenwich.

Results of the magnetical and meteorological observations, 1910. Edinburgh. 1912. var. pag. f°.

Havana. Colegio de Belén, Observatorio.

[Observaciones meteorológicas] Año de 1911. Habana. 1912. 16 p. f°.

Hongkong. Observatory.

Meteorological observations, 1911. Hongkong. 1912. 108 p. f°.

Indo-China. Service météorologique.

Bulletin pluviométrique, 1911. Phu-Lien. 1912. unpaged. f°.

Lisbon. Observatorio "Infante D. Luiz."

Annaes, 1910. v. 48. Lisboa. 1911. 131 p. f°.

Liverpool. Observatory.

Report of the Director . . . and meteorological results deduced from the observations taken . . . 1911. Liverpool. 1912. 45 p. 8°.

Lockyer, William J. S.

Report of the solar eclipse expedition to Vavau, Tonga islands, Apr. 29, 1911 (eastern date). London. 1912. [5], 82 p. 10 pl. f°. (Great Britain. Solar physics committee. Publication.)

London. Solar physics observatory, South Kensington.

Report upon the work, 1911. [n. p.] [1912.] 21 p. 8°.

Mehl, Adolf.

Der Freiballon in Theorie und Praxis. Stuttgart. [n. d.] 2 v. 12°.

Möller, M.

Weltamt für Wetterkunde. Braunschweig. 1912. xvi, 32 p. 8°.

Prussia. Landesanstalt für Gewässerkunde.

Jahrbuch für 1908. Berlin. 1911. var. pag. f°.
Jahrbuch für 1909. Berlin. 1911. var. pag. f°.

Quervain, Alfred de.

Aus der Wolkenwelt. Zürich. [1912?] 10 p. 3 pl. 4°. (Neujahrsblatt d. Naturf. Gesell. in Zürich auf d. J. 1912. 114. Stück.)

Rayleigh, Lord.

Scientific papers. v. 5, 1902-1910. Cambridge. 1912. xii, 624 p. 4°. [Includes papers on the composition of the atmosphere, radiation, tides, and wind pressure.]

Rudaux, Lucien.

Les phénomènes météorologiques dans les Pyrénées. Leurs conséquences; le déboisement. Paris. 1910. 53 p. 8°. (Revue de géographie annuelle.)

Russia. Central physical observatory.

Observations sur la densité de la couche de neige, 1903/4-1907/8, par E. Berg. St.-Pétersbourg. 1911. x, 41 p. f°. (Reprint: Annales de l'Observatoire physique central Nicholas, 1908, 1re partie.)

Schmidt, Albert.

Niederschlagskarten des Taunus. Stuttgart. 1912. 28 p. 3 maps. 8°. (Forsch. z. deut. Landes- u. Volkskunde. 19. Bd. Heft 5.)

Schulze, Franz.

Luft- und Meereströmungen. Leipzig. 1911. 149 p. 16°.
(Sammlung Göschen. No. 551.)

Sutton, J. R.

A note on the land and sea breezes of South Africa. (Reprint: Trans. R. soc. So. Africa, v. 2, pt. 3, 1912. p. 293-300.) Some causes and effects of variation in the range of temperature. (Reprint: Trans. R. soc. So. Africa, v. 2, pt. 4, 1912. p. 341-356.) Sunshine at Kimberley. [n. t. p.] 3 p. 8°. (Reprint: Agr. jour. of the Union of So. Africa, May, 1911.)

Switzerland. Abteilung für Landeshydrographie.

Graphische Darstellungen der Schweizerischen hydrometrischen Beobachtungen so wie der Lufttemperaturen u. Niederschlags-höhen für das Jahr 1910. [German and French text.] Bern. 1911. 11 p. 58 fold. pl. f°.

Ventou-Duclaux, L. & Robert, M.

Bases et méthodes d'études aérotechniques. Paris. 1911.. vii, 572 p. 137 fig. 8°.

Wernicke, E.

Wetterkunde. Leipzig. [1912.] 42 p. 16°. (Naturw.-Techn. Volksbücherei, No. 6.)

Whitson, A. R. & Baker, O. E.

The climate of Wisconsin in its relation to agriculture. Madison, Wis. 1912. 65 p. 8°. (Univ. Wis. Agr. exp. sta. Bull. 223.)

Wilson, Wilford M.

Frost in New York. Ithaca, N. Y. 1912. 507-543 p. 8°.
(Cornell univ. Agr. exp. sta. Bull. 316.)

RECENT PAPERS BEARING ON METEOROLOGY.

C. FITZHUGH TALMAN, Junior Professor in Charge of Library.

The subjoined titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of the meteorological contents of

all the journals from which it has been compiled. It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau. Unsigned articles are indicated by a —.

American society of civil engineers. Proceedings. New York. v. 38. August, 1912.

Grant, Kenneth C. The floods of March 22, 1912, at Pittsburgh, Pa. p. 889-908.

Associated Sunday magazines. September 1, 1912.

Moore, Willis Luther. Weather warnings. p. 12-13.

Cambridge philosophical society. Proceedings. Cambridge. v. 16. pt. 7. 1912.

Oxley, A. E. The detection of small amounts of polarization in light from a dull sky. p. 561-570.

Geographical journal. London. v. 11. September, 1912.

Huntington, Ellsworth. The fluctuating climate of North America. p. 264-280.

Heating and ventilating magazine. New York. v. 9. August, 1912.

Campbell, William. Rotation of normal temperatures. p. 11-13. *Mines and minerals. Denver. v. 33. September, 1912.*

— Barometric pressure and mine gas. p. 66-67.

Nature. London. v. 89. August 29, 1912.

C., R. Forests and rainfall. p. 662-664.

Nature. London. v. 90. September 12, 1912.

Chree, C[harles]. Studies of aurora. p. 38-40. [Review of works by C. Störmer.]

Physical review. Lancaster. v. 35. August, 1912.

Harvey, Frederic A. The half-values of the radioactive deposit collected in the open air. p. 120-127.

Science abstracts. London. v. 15. August, 1912.

Holmes, H. N. Atmospheric ozone. p. 360. [Abstract.]

Scientific American. New York. v. 107. 1913.

— Instrumental observations of the sun's heat. p. 177. (Aug. 31.) [Description and illustration of Dupaigne's instrument.]

Benner, R. C. Smoke, the destroyer. p. 181; 186. (Aug. 31.)

— Black lightning flashes. p. 183. (Aug. 31.)

— Detecting icebergs. p. 194. (Sept. 7.) [Abstract of address by Prof. Barnes.]

— What is miasma? p. 222. (Sept. 14.) [Abstract of lecture by Trillat.]

— The antiquity of the rainbow. p. 236. (Sept. 14.)

Scientific American supplement. v. 74. 1912.

Ewell, Arthur W. The earth's atmosphere, its properties and extent. p. 130-131. (Aug. 31.) [Abstract of paper by A. Wegener.]

— The "green flash." A natural phenomenon illustrated by artificial means. p. 139. (Aug. 31.)

Church, J. E., jr. The conservation of snow. Its dependence on forests and mountains. p. 152-155. (Sept. 7.)

Académie des sciences. Comptes rendus. Paris. t. 155. 2 septembre 1912.

Maltézos, C. Contribution aux phénomènes de la foudre. p. 515-518. [Curious lightning phenomena in a building, ascribed to an "electric wind."] (Aug. 31.)

Archives des sciences physiques et naturelles. Genève. t. 34. 15 août 1912.

Gockel, A. Le rayonnement pénétrant à la surface de la terre. p. 120-126.

Cosmos. Paris. 61 année. 5 septembre. 1912.

Boyer, Jacques. Nouvelles méthodes de mesure des nuages à l'observatoire de Montsouris. p. 232-284.

France. Bureau central météorologique. Annales. Paris. t. 1. 1907.

Angot, Alfred. Études sur le climat de la France. Régime des vents. p. 33-100.

Nature. Paris. 40 année. 1912.

Chassériaud, R. Les quatres formes du vent. p. 161-162. (10 août.)

Coupin, Henri. La neige jaune. p. 225-226. (7 sept.)

Société météorologique de France. Annuaire. Paris. 60 année. Avril-mai. 1912.

Angot, A[lfred] & others. Observations météorologiques faites pendant l'éclipse de soleil du 17 avril 1912. p. 109-120.

Etienne, M., & Corone, A. Observations sur les trombes marines. p. 126-128.

Kaiserliche Akademie der Wissenschaften. Sitzungsberichte. Wien. 120. Band. 1911.

Exner, Felix M. Über die Entstehung von Barometerdepressions höherer Breiten. p. 1411-1434. (November.)

Kaiserliche Akademie der Wissenschaften—Continued.

Hann, J[ulius] v. Ergebnisse von Dr. E. Glaser's meteorologischen Beobachtungen in Sanä (el Jemen). p. 1833-1935. (Dezember.)

Kaiserliche Akademie der Wissenschaften. Sitzungsberichte. Wien. 121. Band. Jänner 1912.

Blumenschein, P. Anselm. Bearbeitung der Potentialgefällesregistrierungen in Kremsmünster in den Jahren 1909-1911. (Beiträge zur Kenntnis der atmosphärischen Elektrizität XLVI.) p. 25-61.

Luftflotte. Mannheim. Band 4. August, 1912.

Schrötter, Hermann v. Das Klima im Flugzeug. p. 116-118.

Meteorologische Zeitschrift. Braunschweig. Band 29. August, 1912.

Günther, S[iegmund]. Die Meteorologie in Bayern. p. 353-366.

Fischer, Karl. Maurers Verdunstungsmessungen an Alpensee und die Verdunstungsmessungen der preussischen Landesanstalt für Gewässerkunde am Grimmitssee. p. 366-372.

Bauer, Josef. Über das atmosphärische Ozon. p. 372-378.

Ficker, H[einrich] v. Kälte- und Wärmewellen in Nordrussland und Asien. p. 378-383.

Stoye, Karl. Hagelkörner, gefallen während des Gewitters am 12. Mai 1912, zu Halle. p. 383-384. [Conical hailstones. Illustrated.]

Süring, R[einhard]. Glimmentladungen an Wolkenrändern. p. 389-390.

Hann, J[ulius]. Klima von Triest. p. 393-396.

Mitteilungen aus den deutschen Schutzgebieten. 25. Band. 2. Heft. 1912.

— Meteorologische Beobachtungen aus dem Grenzgebiet von Kamerun und Spanisch-Guinea. p. 77-78.

Heidke, P. Meteorologische Beobachtungen in Deutsch-Ostafrika. Teil VII. Zusammenstellung der Monats- und Jahresmittel aus dem Jahre 1910 an 49 Beobachtungsstationen. p. 103-175.

Petermanns Mitteilungen. Gotha. 58. Jahrgang. Juli 1912.

Heidke, P. Die periodischen Fehler barometrisch bestimmter Höhenunterschiede in der inneren Tropenzone. p. 21-22.

Mecking, L. Der Witterungscharakter an der Gauss-Station und die Fragen der südhemisphärischen Zirkulation. p. 22-24.

Physikalische Zeitschrift. Leipzig. 13. Jahrgang. 1. September 1912.

Berndt, Georg. Luftelektrische Beobachtungen in Argentinien.

V. Frühling, Sommer, März und April. p. 820-825.

Weltall. Berlin. 12. Jahrgang. 2. Juniheft 1912.

Habenicht, H. Die Eisezeitenparallele zwischen Norddeutschland und Alpen. p. 265-266.

DOG DAYS.

The following is extracted from a letter recently prepared in the Weather Bureau in reply to an inquiry as to the origin and significance of the common custom of referring to certain weather conditions of the summer period as the "dog days."

As this is a subject rarely referred to in meteorological works the letter is reproduced for the information of those who may not have access to the definition of the term.

The term "dog days" belongs to ancient Egyptian astrology. The ancients knew that Sirius, or the Dog Star, rose and set with the sun, or heliacally, during portions of July and August, and assumed that the baleful influence of that star was added to the heat of the sun in those days. But this agreement as to dates varies with every latitude on the earth's surface and with the precession of the equinoxes among the stars. There is therefore no close connection between the duration of the dog days and the dates of our hottest weather. We have our warm, moist, oppressive weather on our Atlantic coast during July to September, whereas it occurs in Australia during January and February. Moreover, our oppressive dog-day weather in New England is quite the opposite to the exhilarating hot, dry weather that occurs at the same time over our western prairie and plateau regions; therefore it is not proper to say "that dog days show up each year at the same time." The dog-day weather of this latitude is simply a combination of the influences of several factors on our bodily comfort. The important factors are southwest to southeast winds, moisture from the ocean, clear sky, hot sunshine. This combination may occur at any time of the year, but is of course most severe when the sun is farthest north of the equator and has unduly heated the atmosphere for a more or less lengthy period.

P. C. D.